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ABSTRACT

The study examined the manner in which self perceptions of learning disabled (LD) children (1) develop in relation to growing social awareness and (2) differ among groups of LD students who are segregated from normally achieving students for varying amounts of their instructional time. Eighty-seven children (in grades 3 though 8) had been placed in learning disabilities resource rooms in which each student attended regular classes and worked for 1 hour each day with an LD specialist in a small group; and 27 children (in grades 7-8) had been placed in self-contained settings for 80% to 100% of their instructional time. All Ss were administered the Perceived Competence Scale for Children. The test measures perceptions across four domains: cognitive competence, social acceptance, physical competence, and general self worth. Ss provided two ratings for each item on the cognitive competence subscale: perceptions of competence in the regular classroom and in the LD classroom. Results of factor analysis revealed that the factor structure of the LD sample differed from that obtained from a normally achieving sample. LD Ss in both resource rooms and self contained classrooms perceived themselves to be more academically competent in their special education classes than in regular classes. Middle school Ss in resource rooms perceived themselves more favorably in terms of cognitive competence in the LD classroom, social acceptance, physical competence, and self-worth than did middle school self-contained students. Resource room Ss tended to perceive themselves as increasingly less academically competent in the regular classroom across grades 3 through 8 and to maintain high perceptions of academic competence in the LD classroom. Elementary Ss in resource rooms perceived themselves as more intelligent and confident in their abilities than did middle school Ss. Finally, results suggested that the extent to which self-contained Ss perceived themselves to be smart and confident was related to their perceived social acceptance from peers and their athletic competence. (CL)

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THE DEVELOPMENT OF LEARNING DISABLED CHILDREN'S SELF-PERCEPTIONS

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Introduction

Until recently, a widely held assumption among both researchers and educators has been that learning disabled children have negative concepts about themselves. Both clinical anecdotes and some empirical research have suggested that a contributing factor in LD children's academic difficulties is that they think poorly of themselves (Alley and Deshler, 1979; Black, 1974; Griffiths, 1970; Rosenthal, 1973). For example, Griffiths (1970) has suggested that the one characteristic dyslexic children share is low self-concept. Rosenthal (1973) found that the dyslexic children in his study reported lower self-perceptions on the Coopersmith Self-Concept Inventory (Coopersmith, 1967) than did nondisabled children. Similarly, both Black (1974) and Rogers and Saklofske (1985) found that LD children showed lower scores on the Piers-Harris Self-Concept Scale (Piers & Harris, 1969) than did the nondisabled children in their studies.

Other research, however, has shown that LD children do not evidence lower self-perceptions than do normal children (Brunner and Starkey, 1974; Donnell, 1975; Endler and Minden, 1972; Rubner, 1978). Endler and Minden (1972) found no evidence of lowered self-concepts among their sample of LD males between the ages of 8 and 13. Rubner (1978) found that LD students aged 8 to 16 did not report lower perceptions of self-concept or general competence than did a sample of nondisabled students. Brunner and Starkey (1974) and Donnell (1975) reported similar negative findings in comparing the self-concepts of LD and nonLD adolescents.

Silverman and Zigmond (1983) point out that the contradictory findings in the literature on self-concept among LD students can be attributed, in part, "to the inconsistency of the definitions of both the LD population and the construct of self-concept among studies. Furthermore, methodological differences, weaknesses in research designs, and the lack of data on the equivalence of the various self-concept inventories used preclude any conclusions based on these results" (p. 478).

A major problem with studies designed to examine the self-perceptions of children with special needs is that measures which have been standardized on normal populations are generally used (Battle, 1979; Battle & Blowers, 1982; Black, 1974; Coleman, 1983, 1984; Rosenthal, 1973; Silverman & Zigmond, 1983; Strang, Smith, & Rogers, 1978; Thomson & Hartley, 1980). As Harter (1985) points out:

> The primary goal of such efforts is to determine whether or not the self-judgments of such children are more negative than those of children without handicaps. That is, the concern is with the <u>level</u> of the child's self-esteem. Typically, measures standardized for use with normal children are employed, without questioning whether the scores derived from these instruments are reliable or meaningful. (p. 14)

Most investigators assume that disabled and nondisabled children interpret the items on a self-concept measure in a similar manner and that any obtained differences between the scores of these groups of children reflect a difference in their self-perceptions. The extent to which disabled children do interpret items on self-concept measures reliably and in a fashion comparable to nondisabled children is an empirical question.

In a recent study, Winne, Woodlands, and Wong (1982) discussed the importance of investigating whether the construct of self-concept is being measured similarly in both normal and special populations. In studying the self-perceptions of LD, normal, and academically gifted students, these authors have pointed out that separate factor analyses performed on the data obtained from each group would best allow for a comparison of the equivalence of each item across the three samples. However, their study fails to adequately demonstrate that LD children and normal children interpreted the items on either the Coopersmith Self-Esteem Inventory (Coopersmith, 1967) or the Sears Self-Concept Scales (Sears, 1966) in a comparable manner given that they did not test a sufficient number of children to perform factor analyses on their data.

Harter's work (1985) has demonstrated the importance of establishing the reliability of self-concept scores obtained from special populations as well as the comparability of these scores with those of normal children. She and her colleagues (Harter, 1982) constructed The Perceived Competence Scale for Children for measuring the self-perceptions of normal children. The model underlying the construction of this measure hypothesized that children do not feel equally competent in every skill domain. Thus, the Perceived Competence Scale was designed to tap independently children's perceptions of: (a) cognitive competence (how well one performs academically), (b) physical or athletic competence, and (c) social acceptance by one's peers. A fourth subscale measures children's perceptions of general self-worth, primarily reflecting the extent to which the child likes him/herself

as a person, independent of any particular skill domain.

A recent study by Silon and Harter (1985) revealed that the psychometric properties of the Perceived Competence Scale are quite different for educable mentally retarded children than for normal children. The four-factor solution, defined by the cognitive, physical, social, and self-worth subscales, obtained for normal-IQ pupils was not revealed for this sample of retarded children. A two-factor solution was obtained, consisting of certain of the scholastic and athletic competence subscale items combining to form one general competence factor, and the social acceptance items defining the second factor. Additionally, the general self-worth items neither clustered together nor systematically loaded on either of these two factors.

Goals of the Study

First goal. The primary aim of this study was to examine the nature of learning disabled children's self-perceptions using the Perceived Competence Scale. Given that previous research had indicated that normal children and children with special needs may not interpret the items of various assessment measures in a similar manner (Silon & Harter, 1985), the first goal of the study was to determine the psychometric properties of the Perceived Competence Scale within a learning disabled population. In order to determine the extent to which LD children interpreted the items on this measure in a manner similar to normally achieving students, a sufficient sample size was employed to perform factor analyses on the LD data. Specifying the factor structure of the scale would determine whether the items loaded

on the same four factors as were originally found with normal students (i.e., the cognitive competence, physical competence, social acceptance, and general self-worth factors). Comparing the factor patterns obtained from both the LD and the nonLD samples would provide evidence as to whether or not these two groups of children interpreted the items on the Perceived Competence Scale in a similar fashion. The reliabilities of the obtained factors were of interest as well.

Second goal. Assuming that the psychometric properties of the Perceived Competence Scale were sufficiently adequate to warrant its use with a learning disabled population, a second goal of the study was to establish norms for LD students.

Third goal. A third aim of this study was to examine developmental or grade differences in the learning disabled students' perceptions of scholastic competence. Much of the research reported on children with learning disabilities has described characteristics of children in the elementary school grades (see Bryan & Bryan, 1981, for a review of this research) although some studies have emerged that focus on LD adolescents (Alley & Deschler, 1979; Silverman & Zigmond, 1983). However, the particular age levels within either the elementary school or adolescent populations have not been distinguished or discussed. While most of the studies to date have not focused on developmental implications in a systematic manner, some investigators are recognizing ontogenetic change as an important area to pursue (Kass, 1977; Keogh, Major-Kingsley, Omori-Gordon, & Reid, 1982; Reid & Hresko, 1981).

The present study sought to examine the manner in which the self-perceptions of LD children who attend resource rooms change across grades 3 through 8. This grade range was selected for study primarily because the time from middle childhood to early adolescence is one during which many developmental changes occur in the child's concept of self. As the child becomes capable of reflecting on the self, the differences between self and other become increasingly more salient. Social comparison becomes a primary method by which the child evaluates the self. Consequently, the fourth goal of this study was to directly examine the influence of social comparison processes on learning disabled students' academic self-perceptions, particularly from a developmental perspective.

Fourth goal. Veroff and Veroff (1980) have stressed that the school environment inevitably emphasizes social comparison. Through the use of such methods as grades, class groupings by ability levels, and various forms of praise, children are subjected to evaluation based on the relative performance of their peers from the time they enter school. In 1969, Veroff suggested that children do not automatically make use of social comparison information until after the early years of school. Veroff and Veroff (1980) have maintained that the years between 6 and 9 are a critical period during which pressure to compare one's performance with others from the family and significant others is particularly salient.

Ruble and her colleagues (Ruble, 1983; Ruble, Boggiano, Feldman, & Loebl, 1980; Ruble, Feldman, & Boggiano, 1976) have investigated the developmental implications of the assumption that social comparison

processes play an integral role in children's self-evaluations. They, too, found that children did not evaluate the quality of their performance on academic tasks relative to the performance of other children until 7 or 8 years of age. Ruble (1983) notes, however, that even preschool children show rudimentary social comparison by being interested in getting the same amount of candy or a toy as good as their friends'. The important point that she has emphasized is that although children can show such basic types of social comparison at an early age, they do not begin to make use of information obtained from these comparisons to evaluate their own performance until age 7 or 8. She has suggested that children's ability to make social comparisons develops through several stages or levels. Factors which are seen to influence the development of social comparison are the cognitive abilities of the child, the subsequent self-evaluation of competence resulting from social comparison, and the specific behavioral effects for the child. Ruble describes how the nature of children's comparisons advance from focusing primarily on concrete categories (i.e. comparing possessions and activities) in younger children to more abstract categories in middle childhood such as abilities, attitudes, and status.

In emphasizing the importance of social comparison processes, Coleman (1983) has offered one of the few attempts to interpret the self-perceptions of mildly handicapped children in terms of cognitive-developmental theory. He found that mildly handicapped preadolescents placed in either a 1- or 2-hour resource room or a self-contained classroom reported higher self-concept scores on the

Piers-Harris Self-Concept Scale (Piers & Harris, 1969) than did regular class students whose teachers indicated they were having sufficient academic difficulties to warrant special education placement. In discussing these findings, he suggested that:

> These children's self-concepts were not influenced by the assignment of handicapped labels since they were not yet capable of understanding the abstract social perspective required to view themselves in terms of their inferior position within the larger social network. Without the cognitive skills to appreciate such abstract social information, it seems likely that the self-image of preadolescent mildly handicapped children depends primarily on fairly overt social comparisons to others in the immediate environment. As a result, the experience of special-class placement enhances self-concept by providing children with a more homogeneous reference group which allows for generally more positive self-evaluations. (p. 10)

While Coleman's link between the self-perceptions of academically handicapped children and social comparison processes is intriguing, he did not directly test the extent to which these children were comparing their abilities to those of their special education peers. Rather, he inferred the use of social comparison processes from the obtained differences in self-concept scores of pupils who were placed in different educational settings.

A second problem with Coleman's study is that the Piers-Harris measure tends to mask important differences in the manner in which children perceive themselves. The Piers-Harris consists of 80 general statements to which children respond <u>yes</u> or <u>no</u>. Examples of items from this measure are: "My classmates make fun of me", "I am a happy person", and "I am an important member of my family". A total score is calculated across the 80 items which tap diverse content. This

total score is then considered to reflect the child's global self-esteem. Harter (1983) has pointed out that Piers and Harris have considered self-concept to refer to a set of relatively stable self-attitudes which are both descriptive and evaluative. Children's concepts about themselves are seen to be relatively unidimensional. Harter's (1982, 1983, 1985) work, however, has indicated that children make clear distinctions between the various competence domains in their lives and that measures which do not differentiate between these domains mask many important differences in the ways in which children feel about themselves. Additionally, the item format of the Piers-Harris lends itself to socially desirable responses. Children are only given two response options to each item on this measure; they are asked to claim that the statement is either characteristic of the way in which they perceive themselves or it is not. Thus, it is difficult to determine on which dimensions Coleman's subjects perceived themselves more or less favorably.

A study by Strang, Smith, and Rogers (1978) represents an attempt to directly manipulate children's use of social comparison processes in reporting their self-perceptions. In this study, academically handicapped students were administered the Piers-Harris under two conditions. In one condition, the students were specifically asked to compare their abilities to those of their normally achieving peers. In the other condition, children were simply asked to complete the items with no mention of with whom they were to be comparing their abilities. The authors found that when the students were asked to compare themselves to their normally functioning peers, their perceptions were

significantly lower than when no reference group was specified by the examiner. Again, the interpretation of these findings is difficult given that the students' self-concept is measured by a single score which represents a combination of a variety of diverse characteristics.

The present study was designed to examine the extent to which LD children employ social comparison processes to differentially influence their perceptions of their cognitive competence in the regular classroom and in the learning disabilities classroom. In order to directly assess these differential perceptions, the LD children who participated in this study were specifically asked to rate their cognitive competence when they were mainstreamed into regular classes and comparing themselves with normally achieving peers and when they were working in the learning disabilities classroom, comparing their performance to their LD peers. It was predicted that few differences would be found between the younger children's perceptions of competence in the regular versus LD classrooms, given that these children would not yet be making use of social comparison processes to estimate their abilities. In contrast, the older children in this study (by about fifth grade and older), who may be using social comparison, should be most affected in the regular classroom. The older children's scores in the regular classroom were predicted to be lower than those for their performance in the LD classroom due to their use of social comparison.

Fifth goal. A fifth goal was to investigate differences in self-perceptions among LD students who were segregated from regular-

class students for varying amounts of their special education instruction. In the earlier cited study, Coleman (1983) found that mildly handicapped children's self-perceptions may vary depending upon the type of educational setting they attend. His study indicated that mildly handicapped students placed in either a 2-hour resource room or a self-contained classroom showed higher self-concept scores on the Piers-Harris Scale than did students spending less of their instructional time in special educational placement. He interprets his findings in terms of social comparison theory (Festinger, 1954), maintaining that students spending a greater amount of time in special education settings compare themselves to other mildly handicapped children who are similar to themselves in achievement. These findings that students who spend more instructional time in special educational placement perceive themselves more favorably than those who spend a greater amount of instructional time in the mainstream may be inconclusive. Again, due to the manner in which self-concept was measured in this study, it is unclear on which dimension(s) the 2-hour resource room and the self-contained students perceived themselves more favorably. Similarly, the extent to which these students responded to the items in a socially desirable manner is unknown.

An aim of the present study was to further examine the nature of LD students' self-perceptions using a measure which had been designed to offset the tendency to provide socially desirable responses and allow the students to differentiate between competence domains in reporting their perceptions about themselves.

In order to examine the differential self-perceptions of LD students segregated from normally achieving students for varying amounts of their instructional time, adolescents from two placement types were selected for study: One group of LD students consisted of those who attended a resource room for one hour per day and regular classes for the rest of their academic day, while a second group consisted of students who spent the majority of their instructional time in a special education self-contained classroom. All of these students were of middle school age (grades 7 and 8). (See Note 1.)

Given that pupils who are placed in self-contained classrooms evidence more severe academic difficulties than do those who attend resource rooms, one might expect that students in self-contained classrooms would report lower self-perceptions (particularly in terms of cognitive competence) than would those placed in resource rooms. In order for these self-contained students to report lower self-perceptions than the resource room students, however, they must possess an awareness of their relatively lower positioning in the social hierarchy of their school. In each of the middle schools from which the students in this study were chosen, the self-contained LD classes were reserved for the lowest functioning students. By middle school age, students would be aware that they attend a special class that is considered to be academically the lowest. The students in Coleman's study were of a younger age ($\underline{M}$ = 11 years) than the middle school students in this study ($\underline{M}$ = 14 years). As he points out, his subjects may not yet have acquired a sophisticated cognitive appreciation for their standing in the social hierarchy of their respective schools and

were basing their self-judgments on fairly overt social comparisons with other mildly handicapped students. The self-contained subjects in this study were expected to show lower self-perceptions than the resource room students because they were at an age at which they were able to cognitively assimilate complex social information regarding the social hierarchy based on ability levels of their schools.

Summary of the Study

In summary, the current study was designed to examine:

1. the psychometric properties (e.g. factor structure, reliabilities) of the Perceived Competence Scale for Children using a learning disabled population and to establish norms on this measure for these children;

2. developmental changes in LD students' perceptions of cognitive competence, social acceptance, and physical competence as well as feelings of general self-worth;

3. the impact of social comparison processes on LD students' perceptions of their academic abilities in the regular classroom and in the LD classroom; and

4. the differential self-evaluations of LD students placed in either a resource room or a self-contained classroom.

Method

Subjects

The participants in the study were 114 children in grades 3 through 8 who had been staffed into learning disabilities programs. All of the students attended school in a suburban school district in the Denver, Colorado metropolitan area (Arapahoe County) and were eligible for LD placement based on the Colorado state criteria. Students were all of middle or upper middle socioeconomic status. Ninety-seven percent of the sample was Caucasian, while 3% was of Hispanic origin. Sixty-five percent of the sample was male and 35% was female. All of the students showed a full-scale IQ of at least 80.

Children in either of two types of placement participated in the study: (1) Eighty-seven children (in grades 3 through 8) had been placed in Learning Disabilities resource rooms in which each student attended regular classes and worked for 1 hour each day with an LD specialist in a small group; and (2) 27 children (in grades 7 and 8) had been placed in self-contained classrooms for 80% to 100% of their instructional time, and were integrated into some regular classes as was appropriate.

The school district's criteria for placement of students in LD resource rooms were as follows:

> Learning Disabled Handicapped shall be a child with a disorder in one or more of the thinking processes involved in receiving, understanding, or using symbols which relate to a severe discrepancy between estimated intellectual ability and actual level of academic performance. The Woodcock Johnson

> Psychoeducational Battery will be used to determine a discrepancy between academic and performance levels measured with the discrepancy 40% table. (Cherry Creek Schools, Learning Disabilities (Perceptual/Communicative Disorder) Entrance Requirements and Placement, 1982).

The school district's placement criteria for students in self-contained classrooms were as follows:

> The self-contained program is designed for students who need a significant amount of pre-organized planning and instruction, a well-defined curriculum with sequenced organization, a structured classroom, low pupil/teacher ratio and related support services due to the complexity of their handicapping condition(s). This model will include students with a significant discrepancy between estimated intellectual potential and actual level of performance, with such discrepancy related to basic disorders in the learning process. Students recommended for self-contained programs should reflect a handicapping condition at a moderate functioning level in two or more of the following areas: Learning Disabilities, Behavior Development, Cognitively Limited, Speech/Language, Vision, and Hearing. Criteria for the existence of a significant discrepancy between academic and performance levels shall be measured with the 50% discrepancy table of the Woodcock Johnson Psychoeducational Battery. (Cherry Creek Schools, Level II Self-Contained (SLLD Multi-Handicapped Program) Entrance Requirements and Placement, 1982).

A detailed description of the entrance requirements and placement criteria provided by the school district for both the Resource Room and Self-Contained programs is presented in Appendix A. Those students from both placement types who were considered by their LD teachers as not evidencing learning disabilities as their primary handicapping condition were excluded from study. Table 1 shows the sample characteristics according to grade and sex for each placement type.

A standardization sample of 291 normally achieving students attending school in Colorado was employed as a comparison group.

Table 1

LD Sample Characteristics
by Grade and Sex

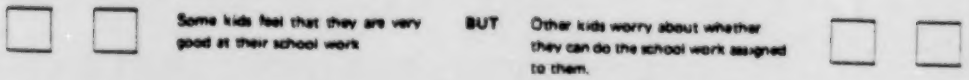
Grade	Placement					
	Resource Room Students n=87			Self-Contained Students n=27		
	Males	Females	Combined	Males	Females	Combined
3	6	4	10	-	-	-
4	6	3	9	-	-	-
5	14	7	21	-	-	-
6	8	5	13	-	-	-
7	10	5	15	11	6	17
8	12	7	19	5	5	10

Instruments

Each of the children was individually administered the Perceived Competence Scale for Children. This measure is presented in Appendix B. The Perceived Competence Scale was initially constructed for the purpose of assessing the self-perceptions of normal children. The unique feature of the scale is that it utilizes a domain-specific approach to measuring self-concept, in which children's perceptions are independently examined across four domains: cognitive competence, social acceptance, physical competence, and general self-worth. Items on the cognitive competence subscale represent the extent to which the child feels he/she is smart, does well on his/her schoolwork, or can complete his/her schoolwork quickly. The social acceptance items refer to the ease with which the child feels he/she can make and maintain friendships. Physical competence items reflect the child's perceptions of his/her athletic ability. Items from the general self-worth subscale tap the extent to which the child likes him/herself as a person; these items ask the child to report how much he/she likes the way he/she is, thinks he/she is a good person, or wants to stay the same. Each subscale is made up of seven items.

A second unique feature of the Perceived Comptence Scale is the item format. A structured alternative format was used in order to reduce the tendency for children to give socially desirable responses.

The scale consists of items such as the following:


Some kids feel that they are very good at their school work
BUT
Other kids worry about whether they can do the school work assigned to them.

For each item, children are given two statements. First, they are asked to decide if they are more like the children described on the left side of the statement or more like those depicted on the right side. After he/she chooses the side which is most like him/her, he/she is asked to mark whether the statement is really true or just sort of true for him/her. The responses are then scored on a 4-point scale ranging from least competent (1) to most competent (4).

Factor analyses performed on data obtained from normally achieving students have revealed that the four subscales of the Perceived Competence Scale represent four clearly differentiated and highly replicable factors. Subscale reliabilities based on coefficient alpha (an index of internal consistency) range from .73 to .83. Test-retest reliabilities range from .69 to .87 at 3 and 9 month intervals.

Procedure

Each child was individually administered the Perceived Competence Scale. Items were read to those children showing evidence of reading difficulties. (Only a few of the seventh and eighth graders who attended resource rooms read the scale independently.) Each child was asked to complete the entire scale. The examiner then circled the item numbers of the seven cognitive competence items after the measure

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had been completed. The child was asked to think about only those items which referred to his/her schoolwork. In order to determine which social reference group the subjects were using, each child was asked, "When you were answering only those questions that have to do with your schoolwork, were you mostly thinking of when you are working in your regular class or when you are working in your learning lab (or LD class)? Which group of students were you comparing yourself to when you answered these questions?" The child was then asked to mark a second response for each cognitive item to indicate how he/she felt he/she performed in comparison to the students in the other class, the class to which the child did not initially refer. In this manner, then, the child provided two ratings for each item on the cognitive competence subscale: One rating represented his/her perceptions of competence in the regular classroom and a second rating represented his/her performance in the LD classroom. Three students who had been placed in self-contained classrooms did not attend any academic classes in the mainstream and thus only provided scores representing their perceptions of cognitive competence in their LD class. The data from these three students were excluded from the analyses comparing the cognitive competence scores based on the students' performance in both the regular classroom and in the LD classroom. The remaining 24 students who had been placed into self-contained classrooms did attend at least one academic class in the mainstream and were able to report their perceptions of cognitive competence in both the regular classroom and the self-contained classroom.

Results

The results will be presented in three sections. The first section will present the psychometric properties of the Perceived Competence Scale for both the LD and standardization samples. The second section will consist of the findings based on group comparisons of the means of the original four subscale scores (cognitive competence, social acceptance, physical competence, and general self-worth). This second section will include an examination of (a) social comparison processes on LD students' perceptions of their academic abilities in the regular classroom and in the LD classroom, (b) the differential self-evaluations of LD students staffed into either a resource room or a self-contained classroom, and (c) developmental changes in LD students' self-perceptions. In the third section, the findings based on two new composite scores, which emerged from a factor analysis of the LD data, will be presented. These new composite scores will be discussed in terms of comparisons between LD students in resource rooms and self-contained classrooms as well as obtained developmental differences.

Psychometric Properties of The Perceived Competence Scale for Children

Factorial Validity. In order to determine the factorial validity of the Perceived Competence Scale with LD students, a factor analysis using an oblique (Promax) rotation was performed. The oblique solution was considered to be the most appropriate method of factor analysis as it allows the factors to intercorrelate. Although it was anticipated that LD children would show differences across the four

subscales, it was also anticipated that there would be some correlation among subscale scores.

The factor patterns for all the LD students tested and for the standardization sample are presented in Tables 2 and 3 respectively. A somewhat different factor structure was obtained for LD students than has been found for normally achieving students. Harter (1982) reported that the factor pattern for normally achieving students in grades 3 through 9 consisted of moderate to high loadings on the four designated subscales. As can be seen in Table 3, items on the cognitive competence, social acceptance, physical competence, and general self-worth subscales consistently and reliably loaded on those factors for which they were designated.

While a four-factor solution was obtained for the LD sample, a number of the items did not load on the factor for which they were intended. As can be seen from Tables 2 and 3, two distinct factors corresponding to the social acceptance and the physical competence subscales emerged, replicating the data obtained from normally achieving children. However, the items measuring children's perceptions of their cognitive competence and their general self-worth formed two new factors not revealed in the standardization sample. Factor 3, labeled Cognitive/Self-Worth - Traits/Confidence, is primarily made up of those items from the cognitive competence (See Note 2) and general self-worth subscales which are more <u>traitlike</u> in nature (e.g., Item 5: "Some kids feel like they are just as smart as other kids their age but other kids aren't so sure and wonder if they are as smart."). Items which appear to reflect the child's generalizations about school

Table 2

Factor Pattern[a], Item Means, and Standard Deviations
for the Learning Disabled Sample

Item Abbreviation	Social I	Physical II	Cognitive/ Self-Worth- Traits/ Confidence III	Cognitive/ Self-Worth- Behaviors/ Contentment IV	Item M	Item SD
Social competence:						
Have a lot of friends.....	.73				3.2	.98
Popular with kids.....	.56		(.34)		2.8	1.03
Easy to like.....	(.37)		.41		3.1	.91
Do things with kids.....	.67				3.3	.96
Easy to make friends.....	.76				3.1	1.11
Important to classmates....			.61		2.7	.95
Most kids like me.....	.67		(.34)		2.8	1.02
Physical competence:						
Do well at sports.....		.59			3.2	.89
Better at sports.....	(.31)	.49			2.9	.83
Do well at new activity....					2.9	.97
Good enough at sports.....		.51			3.0	1.10
First chosen for games.....	(.41)	.35			2.8	.99
Play rather than watch.....	(.33)			.39	3.2	1.02
Good at new games.....		.45			3.0	.82
Cognitive competence:						
Good at schoolwork.....			.54	(.31)	2.5	.99
Like school, doing well....			.61		2.9	.94
Just as smart as others....			.64		2.5	.96
Can figure out answers.....			.38		2.4	.90
Finish schoolwork quickly..		.45			2.2	1.02
Remember things easily.....				.65	2.4	1.02
Understand what read.....				.65	2.2	.99
General self-worth:						
Sure of myself.....			.68		3.1	.89
Happy the way I am.....				.54	3.3	.85
Feel good/way I act.....				.45	3.0	1.04
Sure am doing right thing..			.51		2.9	.89
Am a good person.....			.63		3.3	.83
Want to stay the same.....	(.41)			.50	2.7	.98
Do things fine.....			(.38)	.52	3.1	.88

[a] Loadings less than .27 are not presented for the sake of clarity.

Table 3

Factor Pattern[a], Item Means, and Standard Deviations
for the Standardization Sample

Item Abbreviation	Cognitive I	Social II	Physical III	Self-Worth IV	Item M	Item SD
Cognitive competence:						
Good at schoolwork.....	.64				2.7	.93
Like school, doing well....	.63				2.8	1.02
Just as smart as others....	.67				2.9	1.00
Can figure out answers.....	.45				2.8	.93
Finish schoolwork quickly..	.50				3.1	.80
Remember things easily.....	.42				2.9	1.01
Understand what read.....	.69				2.8	.92
Social competence:						
Have a lot of friends.....		.61			3.0	.93
Popular with kids.....		.66			3.2	1.00
Easy to like.....		.40			2.5	.99
Do things with kids.....		.60			2.9	1.06
Easy to make friends.....		.42		(.43)	2.7	1.07
Important to classmates....		.43			2.8	.98
Most kids like me.....		.49			2.9	.89
Physical competence:						
Do well at sports.....			.79		2.9	1.06
Better at sports.....			.62		2.5	1.20
Do well at new activity....			.45		2.8	.95
Good enough at sports.....			.75		2.7	.98
First chosen for games.....			.55		3.2	1.03
Play rather than watch.....			.60		2.8	.91
Good at new games.....			.46		2.5	1.06
General self-worth:						
Sure of myself.....				.64	2.6	1.12
Happy the way I am.....				.41	3.0	.89
Feel good/way I act.....				.55	2.8	.99
Sure am doing right thing..				.39	3.0	.85
Am a good person.....				.69	3.0	1.00
Want to stay the same.....				.48	2.9	.93
Do things fine.....				.35	2.7	.95

[a] Loadings less than .27 are not presented for the sake of clarity.

load on this factor as well (e.g., Item 17: "Some kids like school because they do well in class but other kids don't like school because they aren't doing very well."). Additionally, the self-worth items that load on this factor appear to reflect the extent to which the child is confident about his/her abilities (e.g. Item 8: "Some kids are pretty sure of themselves but other kids are not very sure of themselves" and Item 28: "Some kids are usually sure that what they are doing is the right thing but other kids aren't so sure whether or not they are doing the right thing"). Throughout the remainder of this paper, Factor 3 will be referred to as the Traits/Confidence composite.

The fourth factor, labeled Cognitive/Self-Worth - Behaviors/Contentment, consists primarily of the remaining items from both the cognitive competence and the general self-worth subscales. These items refer to specific behaviors or concrete manifestations of the child's performance in school (e.g., Item 21: "Some kids wish it was easier to understand what they read but other kids don't have any trouble understanding what they read."). The self-worth items that load on this factor appear to reflect a sense of contentment with how the child is engaging in specific behaviors (e.g., Item 12: "Some kids feel good about the way they act but other kids wish they acted differently"; and Item 24: "Some kids aren't very happy with the way they do alot of things but other kids think the way they do things is fine"). This factor will be referred to as the Specific Behaviors/Contentment composite.

Thus, it appears that the two new composites, which are made up of items from the cognitive competence and self-worth subscales, reflect two separate dimensions in how LD children perceive themselves. The first dimension (Traits/Confidence) reflects the children's traitlike conceptions of their ability in school combined with a sense of confidence in the self. The second dimension (Specific Behaviors/Contentment) refers to more concrete and behavioral manifestations of the children's academic perceptions of the self combined with their satisfaction with these behavioral manifestations.

Item means and standard deviations. Tables 2 and 3 present the item means and standard deviations for the LD and standardization samples respectively, in addition to the factor structures for both groups. Item means for the LD sample range from 2.2 to 3.3 (minimum = 1.00; maximum = 4.00), indicating no ceiling or floor effects. Standard deviations for this sample range from .82 to 1.12, revealing adequate item variability. Item means obtained from the standardization sample fell slightly above the midpoint of 2.5, while the standard deviations hovered around the value of 1.

Reliability. Subscale reliabilities were assessed with coefficient alpha which provides an index of internal consistency. Reliabilities for all LD children tested were .69, .69, .72, .71, .73 for the cognitive competence in the regular classroom, cognitive competence in the LD classroom, social acceptance, physical competence, and general self-worth subscales respectively. By comparison, reliabilities obtained from the standardization sample were .76, .78, .83,

and .73 for the cognitive competence, social acceptance, physical competence, and general self-worth subscales, respectively. The reliabilities of the two new factors, Traits/Confidence and Specific Behaviors/Contentment were .76 and .71 respectively. No group differences were found between the reliabilities of the students staffed into resource rooms and those staffed into self-contained classrooms.

Group Differences

Comparisons of the Original Subscale Scores

While the factor structure did reveal the formation of two new factors, based on the composites of the cognitive competence and general self-worth scores, the reliabilities of the original four subscales were sufficiently adequate to warrant examining the means. Since a major focus of this study was to investigate the students' responses to the cognitive competence subscale, particularly in comparing the scores based on LD students' perceived performance in their regular classes with those based on their perceived performance in their LD classroom, examination of the original subscale scores was theoretically of interest. Table 4 contains the means and standard deviations from the two LD samples and the standardization sample. The LD data will be examined in further detail below for evidence of social comparison processes and for developmental trends.

Table 4

Original Subscale Means and Standard Deviations
for the LD and Standardization Samples

Sample	Subscale									
	Cognitive Competence in the Regular Classroom		Cognitive Competence in the LD Classroom		Social Acceptance		Physical Competence		General Self-worth	
	M	SD	M	SD	M	SD	M	SD	M	SD
All Resource Room Students (n=87)	2.45	.58	2.78	.54	3.00	.60	3.98	.54	3.05	.55
Middle School Resource Room Students (n=34)	2.32	.41	2.78	.47	2.94	.53	3.00	.50	3.02	.50
Middle School Self-Contained Students (n=27)	2.15	.49	2.41	.49	2.75	.67	2.83	.64	2.62	.60
Standardization Sample (Grades 3-9) (n=296)	2.80	.57	-	-	2.93	.70	2.87	.66	3.02	.59

The Impact of Social Comparison Processes on LD Students' Perceptions of Cognitive Competence. A major aim of this study was to directly examine the influence of social comparison processes on learning disabled students' academic self-perceptions. In the introduction, it was hypothesized that LD students would perceive their academic competencies differentially depending upon whether they were comparing themselves with their regular classroom peers or with their LD peers.

As can be seen from Table 4, the mean obtained from all resource room students (across grades 3 through 8) for the cognitive competence scores in the regular classroom ($M = 2.45$) was much lower than the mean for the scores reflecting cognitive competence in the LD classroom ($M = 2.78$). In order to examine the mean differences between the two cognitive competence scores for all of the resource room students, a paired sample t test was conducted. This analysis revealed the difference between the cognitive competence in the regular classroom and the cognitive competence in the LD classroom scores to be highly significant, $t\ (83) = 5.22$, $p < .0001$. This finding supports the hypothesis that resource room LD students would perceive themselves to be more academically competent in the LD classroom than in the regular classroom.

Differences between the cognitive competence scores for those students who attended resource rooms and those who attended self-contained classrooms also were of interest. As can be seen in Figure 1, the mean scores indicated that (a) for both cognitive competence scores, resource room students perceived themselves to be

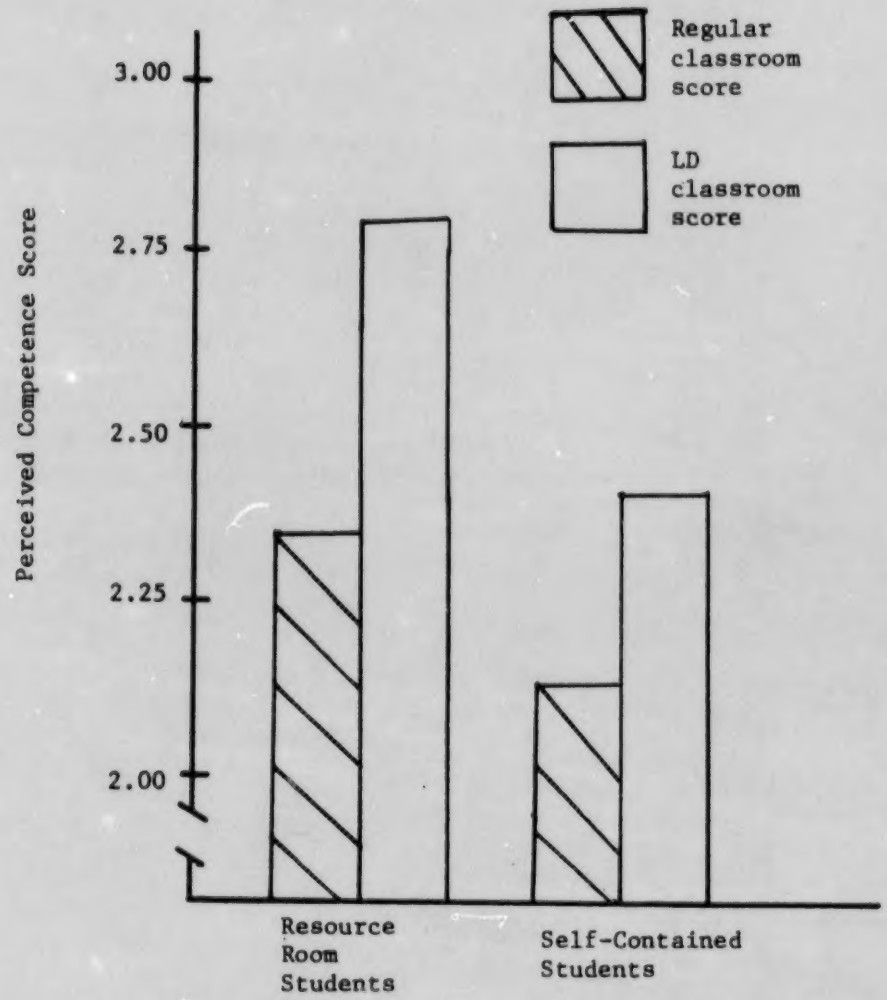

Figure 1

Mean Cognitive Competence Scores
for Middle School Students
in LD Resource Rooms and Self-Contained Classrooms

significantly more competent at academic tasks than did the self-contained students, and (b) across both placement groups, LD students perceived themselves to be significantly more competent in the LD classroom than in the regular classroom.

In order to examine these differences statistically, a 2 (Resource vs. Self-Contained) X 2 (Cognitive Competence in the Regular classroom vs. Cognitive Competence in the LD classroom scores) repeated measures ANOVA was conducted. This analysis revealed significant main effects for both Placement, F (1,51) = 7.50, $p < .008$ and Cognitive score, F (1,51) = 16.48, $p < .0002$. The Newman-Keuls procedure was employed to test the differences between individual pairs of means for this as well as all subsequent analyses warranting such comparisons. The difference between the cognitive competence in the LD classroom scores of students in resource rooms and self-contained classrooms was significant ($p < .01$). This analysis indicated that resource room students' perceptions of competence in the LD classroom were significantly higher than were self-contained students' perceptions. However, no significant difference was obtained between the perceptions of students in resource and those in self-contained classrooms for their perceptions of academic competence in the regular classroom. As can be seen in Figure 1, the main difference in the perceptions of academic competence between LD students staffed into resource rooms and those staffed into self-contained classrooms appears to be in their perceived performance in the LD classroom. While the resource room students tended to have somewhat higher scores for their competence in the regular classroom than did self-contained

students, the difference was not significant.

In the Methods section, there was a description of how students were initially asked to complete the Perceived Competence Scale with no mention of to which reference group they were using in rating their cognitive competence. The students merely completed the measure. After the measure had been completed, they were asked to whom they were comparing their performance when rating their cognitive competence, students in the regular classroom or students in the LD classroom. Students then were asked to complete the cognitive competence items a second time, focusing on their performance in the other class, that to which they did not initially refer. This procedure provided for an examination of the particular social comparison reference group LD children spontaneously used when considering their academic competence. Eighty-four percent of the resource room sample (73 of 87 subjects) spontaneously compared their academic performance to that of their normally achieving peers in the regular classroom. Fifty-four percent of the self-contained sample (13 of 24 subjects) spontaneously compared themselves to students in the regular classroom. Of all LD students combined, 76% (84 of 111) initially focused upon their performance in their regular classes when rating their perceptions of cognitive competence.

Placement Comparisons. It was hypothesized that LD children staffed into self-contained classrooms would evidence significantly lower self-perceptions in all competence domains than would those attending resource rooms. It also was anticipated that the cognitive competence scores for both LD placement groups would be significantly

lower than the obtained scores on the other three subscales (social acceptance, physical competence, and general self-worth). No specific predictions were made regarding the differences between the scores obtained on the social acceptance, physical competence, and general self-worth subscales.

Table 4 indicates that there appears to be little difference between the scores of the social acceptance, physical competence, and general self-worth subscales for middle school students placed in either resource rooms or self-contained classrooms. Resource room students reported higher self-perceptions for all three of these domains than did self-contained students. Furthermore, students from both placement groups showed lower perceptions of cognitive competence in both the regular classroom and the LD classroom than perceptions of social acceptance, physical competence, and general self-worth. These subscale differences for both placement groups are depicted in Figure 2.

In order to examine these differences statistically, a 2 (Resource vs. Self-Contained) X 5 (Cognitive Competence in the Regular classroom vs. Cognitive Competence in the LD classroom vs. Social Acceptance vs. Physical Competence vs. General Self-Worth) repeated measures ANOVA was conducted. Main effects for Subscale, F (4,204) = 19.09, $p < .0001$ and Placement, F (1,51) = 7.13, $p < .01$, were obtained. Comparisons between individual means revealed that (a) resource room students reported significantly higher ($p < .01$) perceptions of cognitive competence in the LD classroom and feelings of general self-worth than did the self-contained students, and (b) students

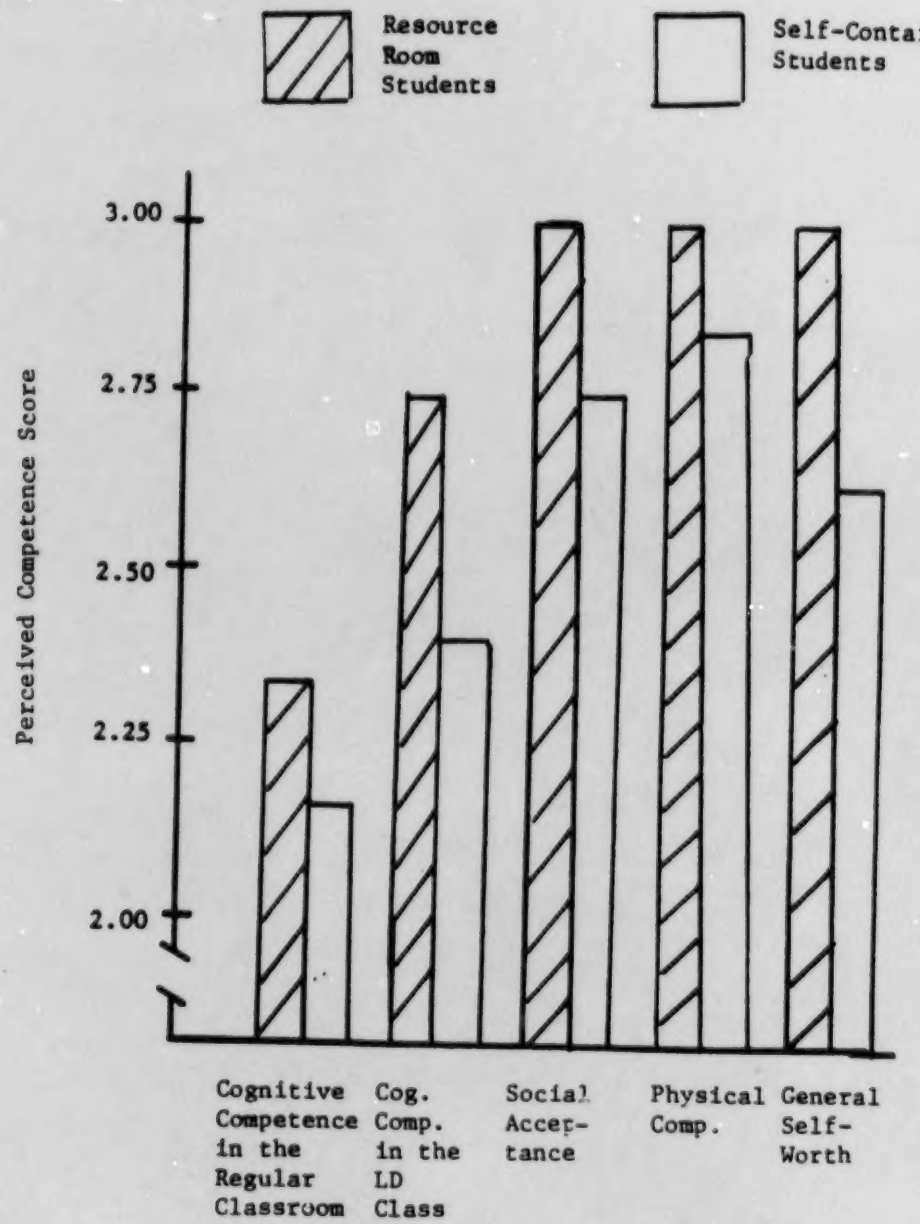

Figure 2

Mean Subscale Scores
for the Middle School Students
in LD Resource Rooms and Self-Contained Classrooms

of both placement groups reported significantly lower ($p < .01$) scores for both cognitive competence in the regular classroom and cognitive competence in the LD classroom than for their perceptions of social acceptance, physical competence, and general self-worth. Significant differences were not obtained between the resource room and self-contained students' scores on the cognitive competence in the regular classroom, social acceptance, and physical competence subscales. However, the tendency was for resource room students to report slightly higher scores than did the self-contained students in these domains as well.

Thus, the findings support the predictions that the LD students who attended self-contained classrooms would perceive themselves less favorably across all domains than would the students who attended resource rooms and that the cognitive competence scores of both placement groups would be significantly lower than those for the remaining three subscales (social acceptance, physical competence, and general self-worth).

Developmental Differences. It was predicted that students staffed into resource rooms would perceive themselves increasingly less competent in the regular classroom and maintain their high perceptions of cognitive competence in the LD classroom across grades 3 through 8. Figure 3 provides support for this pattern. Trend analyses revealed a significant linear trend in LD students' perceptions of decreasing cognitive competence in the regular classroom, across grades 3 through 8, $F(1,85) = 4.18$, $p < .04$. No significant differences were obtained between the cognitive competence in the LD

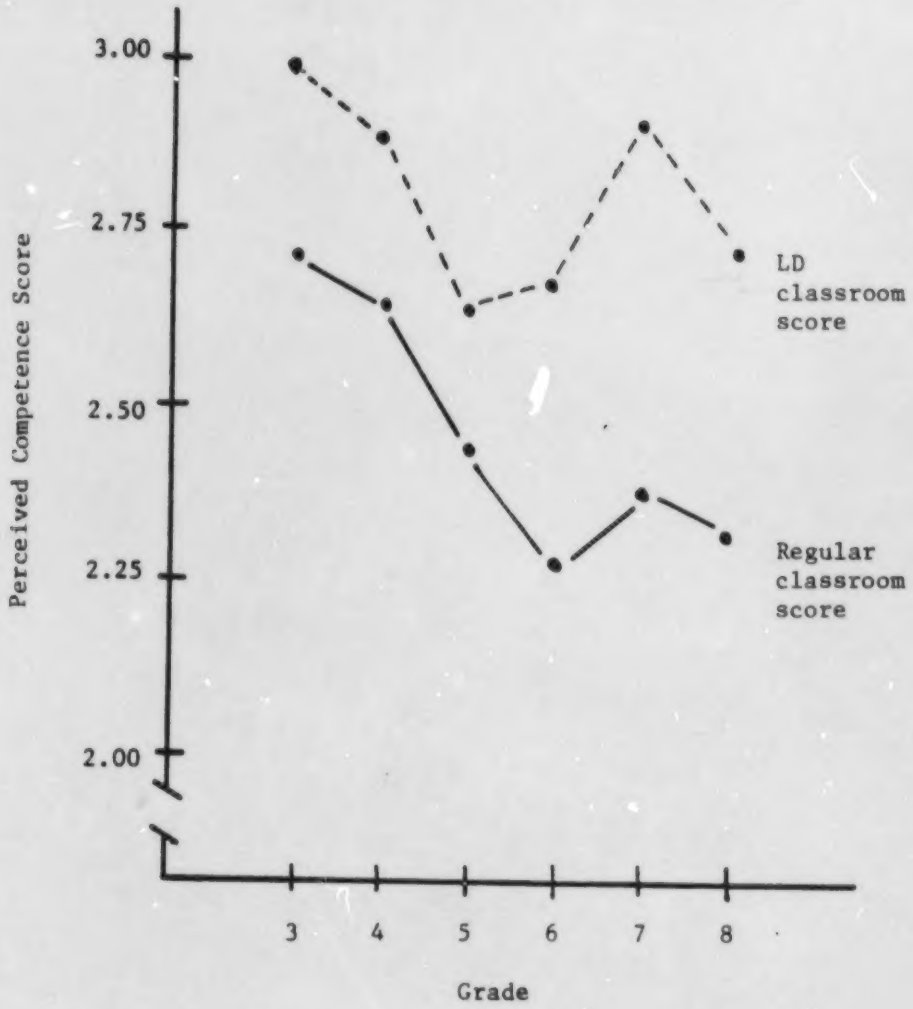

Figure 3

Developmental Trends
of the Cognitive Competence Scores
for Students in Resource Rooms

classroom scores across this grade range by either trend analyses, F (1,85) = .61 p = .44 or the Newman-Keuls procedure of comparing individual means.

Comparisons of the LD Composite Scores

In examining the two new composite scores, Traits/Confidence and Specific Behaviors/Contentment, I was particularly interested in (a) differences between the two composite scores for the resource room and self-contained samples, and (b) developmental differences in the composite scores of students in resource rooms. The relative contribution of both the cognitive competence and general self-worth dimensions to the differences between each of the composites was also of interest. Table 5 shows the means and standard deviations for the composite scores as well as for the respective cognitive competence and general self-worth scores contributing to the composites for each placement group.

Placement Comparisons. Table 5 shows that middle school students in resource rooms perceived themselves more favorably on both the Traits/Confidence and the Specific Behaviors/Contentment composites than did the middle school students attending self-contained classrooms. Furthermore, students in both resource rooms and self-contained classrooms tended to have somewhat higher scores on the Specific Behaviors/Contentment composite than on the Traits/Confidence composite. To examine the differences between the two composite scores for each placement group, a 2 (Resource vs. Self-Contained) X 2 (Traits/Confidence vs. Specific Behaviors/Contentment) repeated meas-

Table 5

Means and Standard Deviations for the Two New Composite Scores

Composite	Placement (Middle School students only)				Grade (Resource Room Students only)			
	Resource Room Students		Self Contained Students		Elementary School Students		Middle School Students	
	M	SD	M	SD	M	SD	M	SD
Traits/Confidence Composite	2.67	.56	2.38	.51	2.97	.59	2.67	.56
Cognitive Competence-Traits items	2.38	.60	2.22	.63	2.77	.76	2.38	.60
Self-Worth-Confidence items	2.94	.61	2.60	.55	3.17	.62	2.94	.61
Specific Behaviors/ Contentment Composite	2.80	.52	2.44	.56	2.75	.67	2.80	.52
Cognitive Competence-Specific Behaviors items	2.34	.75	2.17	.62	2.35	.94	2.34	.75
Self Worth-Contentment items	3.05	.55	2.64	.72	2.97	.75	3.05	.55

ures ANOVA was conducted. This analysis revealed a significant main effect for Placement (Resource vs. Self-Contained), F (1,49) = 6.23, $p < .01$. This finding indicated that both composite scores were significantly higher for resource room students than for self-contained students. Although the means for both placement groups tended to be higher for the second composite (Specific Behaviors/Contentment) than for the first (Traits/Confidence), no main effect for Composite was obtained, F (1,49) = 1.10, $p = .30$.

Developmental Differences. Interesting developmental differences were obtained between the composite scores of resource room students in elementary school (grades 3 through 6) and middle school (grades 7 and 8). Table 5 shows that elementary and middle school students differed in their perceptions of cognitive competence and self-worth on the first composite (Traits/Confidence) but not on the second composite (Specific Behaviors/Contentment). Middle school students perceived themselves less favorably on the Traits/Confidence composite than did elementary school students. Students of elementary and middle school age perceived themselves comparably on the Specific Behaviors/Contentment composite.

In order to investigate the differences in the composite scores between the elementary and middle school students attending resource rooms, a 2 (Elementary vs. Middle) X 2 (Traits/Confidence vs. Specific Behaviors/Contentment) repeated measures ANOVA was conducted. This analysis indicated a Composite X Grade interaction, F (1,83) = 6.22, $p < .01$. Comparisons between individual means revealed a significant difference ($p < .05$) on the Traits/Confidence composite scores between

elementary school and middle school students. Elementary school students reported significantly higher scores on this composite than did middle school students. Furthermore, elementary school students tended to have somewhat higher scores for the Traits/Confidence composite than for the Specific Behaviors composite. No other differences were obtained between the composite scores for students in the two placement groups. These findings indicate that elementary school students perceived themselves as being more intelligent and confident in their abilities (Traits/Confidence) than did the middle school students. Additionally, the elementary school students maintained such a traitlike perception of themselves despite a significantly lower perception of their performance at specific academic tasks (Specific Behaviors/Contentment).

Since mean differences were obtained between the two new composite scores for the elementary and middle school students, the extent to which these differences were primarily due to the contribution of the cognitive competence scores or to the self-worth scores was of interest. Table 5 presents each composite's respective cognitive competence and general self-worth mean scores for both elementary and middle school students. For all students, the cognitive competence scores from the first composite (Traits) were higher than the cognitive competence scores on the second composite (Specific Behaviors). However, this difference is apparently due to the scores for the elementary school students. Additionally, elementary school students tended to have higher self-worth scores from the first composite (Confidence) than on the second composite (Contentment), while middle

school students showed higher self-worth scores on the second composite than on the first.

To investigate the relationships among the cognitive competence dimensions for each of the composite scores, analyses were conducted employing only the cognitive competence scores for each composite. A 2 (Elementary vs. Middle) X 2 (Traits vs. Specific Behaviors) repeated measures ANOVA revealed a significant main effect for Cognitive Competence, F (1,84) = 6.08, $p < .01$, and a significant Grade X Cognitive Competence interaction, F (1,84) = 4.01, $p < .04$. Comparisons between means revealed that the cognitive competence scores from the first composite (Traits) were significantly higher than the cognitive competence scores from the second composite (Specific Behaviors), ($p < .01$) for the elementary school students only. No difference was obtained between the scores for the Traits composite and the Specific Behaviors composite for the middle school students. Additionally, the elementary school students' cognitive competence score from the first composite (Traits) was significantly higher than the same score for the middle school students, ($p < .01$). No differences were obtained between the scores of the elementary and middle school students for the second composite (Specific Behaviors).

To examine the influence of the self-worth dimensions on the obtained developmental differences, a 2 (Elementary vs. Middle) X 2 (Confidence vs. Contentment) repeated measures ANOVA was conducted. Only the self-worth scores from each composite were included in these analyses. A Grade X Self-Worth interaction was obtained, F (1,84) = 4.13, $p < .04$, revealing that elementary school students tended to

have higher scores on the self-worth items from the first composite (Confidence) than on the second composite (Contentment). The middle school students tended to have higher self-worth scores on the second composite (Contentment) than on the first (Confidence). However, none of the differences between individual means were significant.

Correlations among the composite scores and other subscale scores. In order to examine the relationships between the LD students' perceptions of cognitive competence and self-worth as reflected in the composite scores and their perceptions of physical competence and social acceptance, Pearson product-moment correlations were performed. Table 6 presents the correlations among the two LD composite scores and the social acceptance and physical competence subscale scores for both the resource room and self-contained classroom samples. As can be seen in this table, the correlations revealed that the first composite score, Traits/Confidence, correlated moderately with both the social acceptance and physical competence subscale scores from the Perceived Competence Scale. Stronger relationships were obtained between the Traits/Confidence composite and the other subscale scores (social acceptance and physical competence) for the self-contained sample than for the resource room sample.

Table 6

Correlations between the Two New Composite Scores.
Social Acceptance and Physical Competence

	Sample					
	Resource Room (all students)		Resource Room (Middle School only)		Self-Contained (Middle School only)	
Composite	Social Acceptance	Physical Competence	Social Acceptance	Physical Competence	Social Acceptance	Physical Competence
Traits/ Confidence Composite	.35*	.29*	.04	.24	.69*	.65*
Specific Behaviors/ Contentment Composite	.11	.28*	-.10	.32*	.56*	.04

*p<.05

Summary of the Findings

In summary, the results of this study indicated that:

1. The factor structure obtained from the data of a learning disabled sample differs from that obtained from a normally achieving sample. While a four factor solution was obtained for the LD sample, items from the cognitive competence and self-worth subscales clustered together to form two new composites, not seen in the standardization sample. One composite consists of the cognitive competence items that reflect children's traitlike conceptions of the self and the general self-worth items that refer to their confidence in the self. The other composite contains the remaining cognitive competence and self-worth items and reflects the extent to which children feel competent at specific academic tasks and are content with themselves. Items corresponding to the social acceptance and physical competence subscales were clustered respectively.

2. LD students in both resource rooms and self-contained classrooms perceived themselves to be more academically competent in their respective special education classrooms than in regular classes. Additionally, 84% of the resource room students spontaneously compared their academic performance to that of their normally achieving peers, while only 54% of the self-contained sample made this spontaneous comparison.

3. Middle school students placed in resource rooms perceived themselves more favorably in terms of cognitive competence in the LD classroom, social acceptance, physical competence, and self-worth than

did middle school self-contained students.

4. Resource room students tended to perceive themselves to be increasingly less academically competent in the regular classroom across grades 3 through 8 and to maintain high perceptions of academic competence in the LD classroom.

5. As shown by the Traits/Confidence composite scores, elementary school students in resource rooms perceived themselves as being more intelligent and confident in their abilities than did the middle school students. Additionally, the elementary school students maintained such a traitlike perception of themselves despite a significantly lower perception of their performance at specific academic tasks. Middle school students, however, did not appear to maintain a traitlike perception of themselves as being intelligent and confident.

6. Self-contained students' social acceptance and physical competence scores correlated with their Traits/Confidence composite score indicating that the extent to which these students perceive themselves to be smart and confident in their abilities is related to their perceived social acceptance from their peers and athletic competence.

Discussion

The primary aim of this study was to examine the nature of learning disabled children's self-perceptions using The Perceived Competence Scale for Children. A major goal of the investigation was to determine the extent to which the Perceived Competence Scale could be meaningfully utilized with an LD population. The results indicated that while LD students systematically differentiate the items into four distinct and reliable factors as do normal students, the manner in which the four clusters are formed differs from that of normals. The creation of the two new composite scores, Traits/Confidence and Specific Behaviors/Contentment, suggests that LD students construct a network of perceptions about the self in such a way that their feelings of self-worth (how much they like themselves as a person, are sure about themselves, and are happy with themselves) are intimately linked to their perceptions of cognitive competence in the regular classroom. While the cognitive competence and general self-worth scores are correlated for normal students (r = .49), the items for these two subscales do not load on the same factors as was found for LD students. Thus, while normally achieving children differentiate between their perceptions of cognitive competence in school and their feelings of general self-worth, LD children seem to perceive their worth as a person as being closely tied to their perceptions of competence in the regular classroom.

The manner in which LD children combined the items from both the cognitive competence and self-worth subscales formed an interesting pattern. On the first composite, the general self-worth items

reflecting confidence in the self tended to cluster with the cognitive competence items reflecting a traitlike conception of one's academic abilities. LD children appear to construct a network of perceptions of the self such that perceiving oneself as being smart is linked to the extent to which he/she feels confident about the self. Likewise, the second composite, Specific Behaviors/Contentment, suggests that these children perceive the extent to which they are content with the self as being related to their perceptions of competence at specific academic tasks. These findings indicate that LD children are differentiating between their perceptions of their intellectual ability and their actual performance at specific tasks. Not unlike the model used by professionals to identify LD students in which a discrepancy between aptitude and achievement is determined, these pupils apparently are recognizing that perceptions of ability and achievement can be considered separately. Given that many LD students receive the message from their teachers and parents that they are intelligent despite the fact that they are experiencing some difficulties at specific academic tasks, the social environment seems to support such a differentiated perception of aptitude and achievement in the minds of these youngsters. Thus, one might expect that many LD students would show higher scores on the Traits/Confidence composite than on the Specific Behaviors/Contentment composite.

Since the findings bearing on the relationship between LD students' perceptions of cognitive competence and self-worth are correlational in nature, no statements about causality may be made. However, they do suggest that the link between perceived academic performance

and perceptions about the self is strong in this sample of LD children. Many of those who stress the importance of this link between conceptions about the self and academic achievement have assumed that the two are indeed related (Covington & Beery, 1976). This study supports the hypothesis that LD students' perceptions of cognitive competence and worth as a person are intimately tied. Further research could determine the relationship between actual achievement and perceptions of the self, particularly in terms of the two new composite scores. One might expect that LD children's actual achievement scores would be more closely related to their scores on the Specific Behaviors/Contentment composite than on the Traits/Confidence composite.

The emergence of the composite scores further supports the stance maintained by Harter (1985; Silon & Harter, 1985) that one cannot assume that measures that have been standardized on samples of normally achieving students can be employed meaningfully with special populations without modifications. The results of this study suggest that a revised version of the Perceived Competence Scale is needed to examine systematically the self-perceptions of LD students. A revised version of this measure currently is being tested. This revision consists of two separate subscales aimed at measuring perceptions of cognitive competence in LD students. One subscale is made up of items which refer to the students' traitlike or generalized conceptions of his/her academic performance while the other subscale contains items reflecting the students' perceived competence at specific academic tasks.

It is important to recognize that children with special needs may differ from normally achieving students in their interpretations of the items on self-report measures and to consider the differences between children of various diagnostic categories in measuring their self-perceptions. We cannot assume that all children evidencing intellectual and/or academic difficulties will interpret assessment measures in a similar manner. Not only may the level of children's self-perceptions differ for normally achieving students and those with special needs, but the structure of how children interpret the items may differ. Silon and Harter's (1985) study indicated that educable mentally retarded children do not make as fine differentiations in self-judgments as do either LD or normally achieving students. Thus, the same measures may not be suitable for all groups of children. This and the Silon and Harter study indicates that we need separate measures for examining the self-perceptions of different groups of children which are tailored to their particular needs and can accurately reflect the manner in which they perceive themselves.

Social and Developmental Implications. The findings of this study suggest that the influence of social comparison processes on LD students' perceptions of academic competence is strong. Students staffed into resource rooms and self-contained classrooms both reported that they perceived themselves to be much more academically competent in the LD classroom than in the regular classroom. Furthermore, the discrepancy between resource room students' perceptions of competence in the regular classroom and in the LD classroom widens with development. As students become increasingly sophisticated in

their ability to use social comparison information in order to evaluate the self, the differences between self and other become salient. By middle school age, students in both resource rooms and self-contained classrooms are strongly recognizing that, compared to their regular class peers, they may be performing less well at academic tasks. They may require more time to complete assignments, additional help from their teachers, and/or, at times, modified assignments. However, in comparison to their LD peers, they perceive themselves as being more academically competent. When working in their LD classroom, they are in the company of students of a more comparable achievement level to themselves than in the regular classroom. The discrepancy in performance between LD children and their peers is not as wide in the special education classroom as in the regular classroom. By middle school age, LD students are recognizing such discrepancies in academic performance and are incorporating the information obtained from social comparisons into their self-system. As a result, they perceive themselves to be much more competent in their LD classroom than in their regular classes.

The findings suggest that in assessing children's perceptions of cognitive competence, it is important to determine the particular reference group with which they are comparing themselves in making a self-evaluative judgment. LD children seem to live in two academic worlds, that of regular education and that of special education. Each type of educational setting differentially influences children's self-perceptions. As a result, LD children appear to possess two academic self-concepts. One concept reflects their self-perceptions

in the regular classroom with their normally achieving peers, while the other reflects their perceptions of the self in the world of special education with their LD peers. Knowing which setting children are focusing upon in making a judgment about their academic competence is critical to understanding how they feel about themselves.

The finding that 84% of the resource room subjects in this study spontaneously compared themselves to their regular classroom peers while only 54% of the self-contained students spontaneously used this reference group indicates that misinterpretations in children's scores can be easily made. Were one to compare the perceptions of students in resource rooms with those of students in self-contained classrooms without inquiring which reference group was being employed by each group in making a judgment about the self, one might erroneously conclude that students in self-contained classrooms perceive themselves to be more academically competent than do students who attend resource rooms. This is because a greater number of self-contained students may be using their LD peers as the reference group with which to compare themselves than are resource room students. The results of this study suggest that most resource room students spontaneously employed a reference group consisting of their normally achieving peers. Such an argument is consistent with Coleman's findings cited earlier. He has suggested that the self-contained students in his sample maintained higher self-perceptions than the students attending resource rooms because they were comparing themselves to other mildly handicapped students. However, as was shown in this study, when both placement groups are using the same reference group with which to

judge their academic abilities, resource room students appear to perceive themselves as being more competent in the LD classroom than do self-contained students, and as equally competent in the regular classroom.

Silon and Harter's (1985) study indicates that not all mainstreamed students spontaneously compare themselves to their normally achieving peers as did the resource room students in this study. Nearly all of the educable mentally retarded children in their study were found to compare their performance to that of other retarded pupils. They point out that:

> Paradoxically, perhaps, the learning disabled child's scholastic competence scores are lower than the scores for the mentally retarded, even though the intellectual deficits of retarded children are considerably greater. However, the fact that the learning disabled child compares the self to regular pupils whereas the retarded child compares the self to other retarded pupils makes this pattern understandable. (p. 229)

Thus, in order to accurately interpret the self-perceptions of special students, one must be aware of the particular reference group with which the children are comparing themselves.

It is interesting that the only dimension on which the two placement groups did not differ was for their perceptions of cognitive competence in the regular classroom. While resource room students tended to have slightly higher mean scores for their perceptions of academic competence in the regular classroom than did the self-contained students, the difference was not statistically significant. Students of both placement groups appear to perceive themselves as not performing at a competent level in the regular classroom. However, why would the

self-contained students have perceived themselves significantly less competent in the LD classroom than did the resource room students, given that in each LD class, students are in the company of peers of a comparable achievement level? One might expect that if these self-contained students were comparing themselves solely to other students in their LD class, their perceptions of academic competence would be comparable to those of resource room students comparing themselves to other resource room students. It may very well be that the self-contained students in this study have begun to acquire an appreciation for a hierarchy of achievement levels which exists at their particular middle school. Perhaps they are recognizing that they must be relatively low functioning academically to be placed in a special education self-contained classroom while the majority of the student body attends many classes during the academic day. Thus, by the seventh and eighth grades, perhaps these self-contained students are becoming "capable of understanding the abstract social perspective required to view themselves in terms of their inferior position within the social network" that Coleman (1983, p. 10) discussed as having not yet developed in his sample of mildly handicapped students. A comparison of the cognitive competence scores for the normally achieving sample and the LD samples further suggests that LD middle school students may be considering their competencies in terms of the larger social network of their schools. LD students reported lower perceptions of cognitive competence in both the regular and LD classrooms than did normally achieving students. However, the scores for the social acceptance, physical competence, and general self-worth subscales are comparable between the LD and normal groups of students. Thus, LD

students are not only evidencing differences between their perceptions of academic competence in the different educational settings they attend, but also perceiving themselves to be much less competent in school than do normally achieving students. The finding that LD students do not differ substantially in their perceptions of social acceptance, physical competence, and general self-worth further indicate that it is important to separately consider the specific domains of students' lives in measuring their self-perceptions. This study has shown that LD students' lower self-perceptions may be limited to academic competence. An interesting area for future research would be to attempt to further clarify the nature of the social comparison reference groups utilized by LD children and adolescents. Asking students to not only compare themselves to their own LD peer group and to students in regular classes, but to students in <u>other</u> LD classes (i.e. asking self-contained students to compare themselves to resource room students) may continue to illuminate the patterns of self-perceptions these children possess.

While social comparison may not be the <u>only</u> process differentiating the regular classroom setting from the LD setting for these students, this study has shown it to be an <u>important</u> process. Larger class sizes and smaller pupil/teacher ratios present in the regular classroom also may influence students' perceptions of competence. However, directly asking the students to compare themselves to either their normally achieving peers in the regular classroom or to their LD peers seems to have made the social comparison dimension particularly salient in this study. An additional aim for future research might be

to systematically examine the relative influences, in addition to social comparison, which impinge upon the LD child's self-evaluative processes.

Comparisons of the LD Composite Scores. The developmental differences obtained in the resource room students' perceptions of cognitive competence in the regular classroom and general self-worth as reflected by the two composite scores point to interesting changes in these students' concepts about the self. It appears that elementary school students perceive themselves to be relatively smart and confident in the self as reflected by the Traits/Confidence composite score, despite the perception that they are not particularly competent at specific academic tasks (Specific Behaviors/Contentment dimension). It is as if these students are maintaining the belief that, "I think I am smart, I just have difficulties at specific tasks in school (e.g., reading)". Such an attribution about the self is understandable in that this is the message many LD students are given by significant adults. However, continued perceptions of difficulty in specific areas of academic performance may take their toll on the self-system of LD adolescents. By middle school, a significant drop in the Traits/Confidence composite score is found such that these students perceive themselves to be less intelligent and less confident in themselves than do students of elementary school age. As adolescents acquire increasingly sophisticated cognitive-developmental abilities to reflect upon the self, the implications of continued struggles with academic tasks appears to result in a less favorable traitlike conception of the self as an academic achiever than was held earlier in

development. These findings are consistent with those of Harter (1982), Connell (in press), and Harter & Connell (1984), in which changes in the self-system occur with the transition to junior high school. These investigators have found that with the advent of junior high, normally achieving adolescents begin to perceive their cognitive competence in an unrealistical manner (Harter, 1982) and to attribute increasingly more of their academic successes and failures to unknown sources (Connell, 1980; Harter & Connell, 1984). The manner in which LD adolescents' perceptions about the self similarly shift would be a fruitful area of study.

The present study further supports the argument that the particular patterns of self-perceptions among subgroups of children need to be examined. The pattern of self-perceptions found for LD children not only varies depending upon whether they attend a resource room or a self-contained classroom but according to developmental level as well. The obtained factor structure, which differs from that found for normal students and other groups of special education students (e.g. the educable mentally retarded children in Silon and Harter's study), provides evidence that the manner in which LD students construct their self-system is not only complex but unique. Perhaps a viable direction for intervention efforts with these children would be to help them disentangle their perceptions of worth as a person from their perceptions of academic competence. In such an effort we might wish to encourage them to recognize that they have strengths in areas other than school and that they can like themselves despite their scholastic difficulties. Research efforts aimed at further illuminat-

ing the kaleidoscope of self-perceptions of LD children and adolescents would be a particularly fruitful domain of study.

Summary of Directions for Future Research

In summary, future research may be directed toward:

1. Standardizing the revised Perceived Competence Scale for Children for use with LD students.

2. Further delineating the pattern of LD children's self-perceptions in terms of the particular social comparison reference groups employed for evaluating the self, developmental implications of the use of various comparison groups, and differences between LD students attending a variety of educational settings. The manner in which students who attend private schools for the learning disabled differ with respect to their self-perceptions from students who remain in public school programs would be an interesting domain of study.

3. Investigating the relationship between LD students' scores on the Traits/Confidence and Specific Behaviors/Contentment composites and other variables such as actual achievement levels.

4. Systematically comparing the self-perceptions of LD children with those of normally achieving students using samples which have been matched for age, sex, school attended, etc.

5. Outcome studies which systematically reveal those intervention efforts which may be most effective in helping LD students perceive themselves in an adaptive and functional manner.

Footnotes

1.Due to a limited number of elementary school age children who had been placed in self-contained classrooms, all the students in the self-contained sample were of middle school age (grades 7 and 8).

2. In order to allow for a direct comparison between the factor structures obtained for normal and LD students, only the cognitive competence scores which were based on the LD students' perceptions of competence in the regular classroom were included in the factor analysis. Thus, the cognitive competence scores contributing to the two new composites reflect the LD students' perceptions of scholastic ability when they are mainstreamed into regular education classes.

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Appendix A

LEARNING DISABILITIES
(Perceptual/Communicative Disorder)

I. ENTRANCE REQUIREMENTS AND PLACEMENT

1.03(6) Identifiable Perceptual or Communicative Disorder shall mean Learning Disabled Handicapped. Learning Disabled Handicapped shall be a child with a disorder in one or more of the thinking processes involved in receiving, understanding, or using symbols which relate to a severe discrepancy between estimated intellectual ability and actual level of academic performance.

A learning disability may occur concomitantly with other handicapping conditions (e.g. sensory impairment, mental retardation, social and emotional disturbance) or environmental influences (e.g. cultural differences, insufficient/inappropriate instruction, psychogenic factors).

Eligibility for entrance, exit, or continuation in a PCD program depends upon a student meeting the conditions noted in the definition above: (1) evidence of a significant discrepancy; and (2) a disorder in learning processes.

II. REFERRAL

A referral decision must be made by a multidisciplinary team on a case by case basis. The team must be made up of at least:

- The child's regular teacher
  (If the child does not have a regular teacher, then a person qualified to teach a child of that age must be assigned to the team.);
- A person qualified to conduct individual diagnostic examinations;
- Special education director or designee;
- PCD teacher;
- School building administrator or designee;
- Any other professional personnel who has assessment information which is pertinent to the child's problem; and
- Parents must be given a genuine opportunity to be part a of the team, but they may choose not to attend.

The team shall maintain accurate minutes of the staffing that should include a statement of:

- Whether the child has a perceptual communicative disorder;
- The relevant behavior noted during the observation of the child;
- The relationship of that behavior to the child's academic functioning;
- The educationally relevant medical findings, if any; and
- Whether there is a severe discrepancy between achievement and ability which is not correctable without special education and related services.

The team shall determine the effects of environmental, cultural, or economic disadvantage as it relates to the student.

Each team member shall certify in writing whether the report reflects his or her conclusion. If it does not reflect his or her conclusion, the team member must submit a separate statement presenting his or her conclusions. 34 CFR 300.543

III. ASSESSMENT

1.03(6)(c) A standardized, valid, and reliable test should be given to determine both the student's ability level (IQ) and academic achievement level. (Woodcock Johnson Psychoeducational Battery and Speech/Language criteria).

Students suspected of having a Learning Disability handicap shall receive a comprehensive assessment. A comprehensive assessment is a broad spectrum which results in a profile of the student as a learner. Students shall be assessed in the five functioning areas (Physical, Communicative, Social, Psychological, and Educational) to the degree appropriate. Two or more formal instruments will be used in the processing area in addition to observational data.

1.03(6)(b) When a comprehensive assessment is conducted, all five functional areas of a student are examined. If there is no concern identified in a given functional area (i.e. vision), a report should be on file. The report should state that the functioning area was examined and that there was no reason for concern identified.

1.03(6)(a) Criteria for impairment in the thinking processes shall be the exhibition of two or more of the following behaviors at a rate greater than the child's peers in his/her environment:

1.03(6)(a)(i)	Failure to attend
1.03(6)(a)(ii)	High activity level
1.03(6)(a)(iii)	Failure to follow directions
1.03(6)(a)(iv)	Failure to retain/recall learned information
1.03(6)(a)(v)	Failure to organize self in time and space
1.03(6)(a)(vi)	Failure to integrate and apply conceptual skills
1.03(6)(a)(vii)	Failure to tolerate academic stress
1.03(6)(a)(viii)	Failure to monitor errors
1.03(6)(a)(ix)	Demonstrates fine motor problems which are not due to a physical disability
1.03(6)(a)(x)	Failure to receive, organize, and integrate information

A documented behavioral observation should be made at two different times and/or situations. The observer should count behaviors on two other students in the same time block or situation. Behaviors should be tallied for each of the three students. Determination of whether or not the student's behavioral analysis deviates from the norm of the particular regular classroom observed should be made. At least one team member other than the regular teacher shall observe the

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child's academic performance in the regular classroom setting or an environment appropriate for the child.

Observation:

Observation of the student should focus on the student's typical behavior in the regular classroom. Observations made in settings such as the resource room may not be appropriate since the student may behave differently when the curriculum or class structure is altered. The regular classroom teacher should be the best source of information regarding the student's ability to cope in the educational environment. Observation should allow for enough time to verify accurate data in day to day classroom behavior by more than one observer.

IV. ANALYSIS OR DISCREPANCY INDICATORS

Analysis or discrepancy indicators will be based on a summation of the following:

- Criteria for the existence of a significant discrepancy shall be a 40% discrepancy between academic and performance levels measured with the 40% discrepancy table;
- Health trauma and/or developmental delay;
- Functioning level in the classroom (academic indicators);
- Processing deficits; and
- Social and behavioral indicators.

Fourth grade and up will use the Woodcock Johnson Psychoeducational Battery to establish a discrepancy between academic and performance levels measured with the 40% discrepancy table.

Kindergarten - Third Grade - Youngsters (K - 3rd grade) suspected of learning disability and language disorders will need to have some measurement of IQ for establishing a discrepancy between academic and performance levels.

To determine a 40% discrepancy, the following steps should be followed:

A. Multiply the student's actual grade placement by the student's IQ to obtain expected achievement.

B. Multiply the expected achievement by .60 to obtain the cut-off criteria.

C. Compare the student's academic performance to the cut-off criteria. If the student's performance is at or below the cut-off criteria, the student meets this component of the definition.

For example:

Actual grade X IQ = Expected Achievement

EA X .6 = Cut-off Criteria

$$\frac{6 \times 94}{100} = 5.64$$

5.64 X .6 = 3.38

Obviously, learning process disorders are not measurable on valid and reliable standardized instruments and thus require some clinical judgments to be made by the staffing committees. The minutes of the staffing committee should reflect the discussion of this criteria and/or the method used to determine that a learning process disorder exists.

V. TRANSFER PLACEMENT

A direct transfer placement will follow both federal and state rules, regulations, and guidelines.

VI. DIAGNOSTIC PLACEMENT

A 20-day diagnostic placement may be used in helping to determine the appropriate special education placement for a student.

VII. EXCLUSION CRITERIA

The wording of the "exclusion clause" in the current definition of learning disabilities lends itself to the misinterpretation that individuals with learning disabilities cannot be multihandicapped or or be from different cultural and linguistic backgrounds. It is essential to understand and recognize learning disabilities as they might occur within varying handicapping conditions as well as different cultural and linguistic groups. Individuals within these groups frequently have received inappropriate educational assessment, planning, and instruction. Therefore, a learning disability may occur concomitantly with other handicapping conditions, i.e. sensory impairment, mental retardation, social and emotional disturbance, or environmental influences (e.g. cultural differences, insufficient/inappropriate instruction, or psychogenic factors).

PROGRAM DESCRIPTION
LEVEL II - SELF-CONTAINED
(To be applied to SLLD Multihandicapped Program)

The Level II Self-Contained program is designed for students who need a significant amount of pre-organized planning and instruction, a well-defined curriculum with sequenced organization, a structured classroom, low pupil/teacher ratio, and related support services due to the complexity of their handicapping condition(s). Although these students are assigned to the Level II Self-Contained classroom for 80%-100% of their instructional time, if at all possible, they will be mainstreamed into some regular academic classes. The class ratio will be a maximum of 1:12 per teacher.

The multidisability model allows for students regardless of label to be clustered on the basis of specific instructional needs.

This model will include students with a significant discrepancy between estimated intellectual potential and actual level of performance, with such discrepancy related to basic disorders in the learning process. These students manifest a significant degree of severity in handicapping conditions as well as severity of learning, which interferes with the "normal" classroom expectations and functioning level. This alternative classroom is an educationally modified self-contained setting, which provides a long-range independent program structure specified for students' needs. The teaching staff will include teachers dually endorsed in two or more combinations of Special Education.

To be eligible, a student must be classified according to one of the traditional categories and meet existing criteria. For reporting purposes only, students must still be categorized by disability in accordance with existing state regulations regarding funding and teacher certification. The Level II Self-Contained program can include children in the areas of learning disabilities, behavior development, cognitively limited, vision and hearing, and physically handicapped.

I. ENTRANCE REQUIREMENTS AND PLACEMENT

A. Eligibility for entrance, exit, or continuation in a Level II Program depends upon a student meeting the existing criteria as listed in (C) below with evidence of a significant discrepancy or a severe disorder in the learning processes.

B. Administrative Review:
All current testing reports and histories will be written in a case report form and sent to the appropriate coordinator(s) for administrative review.

C. Students recommended for the Self-Contained Level II program should reflect a handicapping condition at a moderate functioning level in two or more of the following areas:

- Learning Disability - at or below the 50% discrepancy level
- *Behavior Development - moderate functioning level
- *Cognitively Limited - functioning in the moderate range
- Speech/Language - Level III Criteria (Speech/Language Criteria)
- Vision - See existing criteria
- Hearing - See existing criteria

*Behavioral analyses should indicate a discrepancy from the norm for that particular classroom.

II. REFERRAL

A. Before a Self-Contained Level II referral, there must be an extension of time in existing building level special education programs. A minimum of 2.5 contact hours per day should be the initial consideration before an alternative delivery model is considered. Other considerations of meeting the student's needs through at least two documented strategies applied in the regular curriculum, change of teacher(s), and space accommodations should have been implemented.

B. A minimum of one quarter of therapeutic time should be spent in the sending school in appropriate special education programming. All available special education services in the building should have been utilized to the maximum for at least one school quarter unless the student is in a transfer placement.

C. The Program Coordinator(s) will establish communication with referring teacher(s) for case study review.

D. Staffing - programming and/or placement recommendations will include the receiving teacher(s) and other professionals.

E. The home school should be responsible for referral procedures and diagnostic testing.

III. ASSESSMENT

A. A standardized, valid, and reliable test should be given to determine both the student's ability level (IQ) and academic achievement level (Woodcock Johnson Psychoeducational Battery and Speech/Language criteria).

B. A documented behavioral observation should be made at two different times and/or situations.
The observer should count behaviors on two other students in the same time block or situation. Behaviors should be tallied for each of the three students.
Determination of whether or not the student's behavioral analysis deviates from the norm of the particular regular classroom observed should be made.
At least one team member other than the regular teacher shall observe the child's academic performance in the regular classroom setting or an environment appropriate for the child.

C. Observation of the student should focus on the student's typical behavior in the regular classroom. Observations made in settings such as the resource room may not be appropriate since the student may behave differently when the curriculum or class structure is altered. The regular classroom teacher should be the best source of information regarding the student's ability to cope in the educational Observation should allow for enough time to verify accurate data in day to day classroom behavior by more than one observer.

What I Am Like

NAME _____ BOY OR GIRL (circle which) AGE _____ BIRTHDAY _____ CLASS OR GROUP _____

SAMPLE SENTENCES

	REALLY TRUE for me	SORT OF TRUE for me				SORT OF TRUE for me	REALLY TRUE for me
a.	☐	☐	Some kids would rather play outdoors in their spare time	BUT	Other kids would rather watch T.V.	☐	☐
b.	☐	☐	Some kids never worry about anything	BUT	Other kids sometimes worry about certain things.	☐	☐
1.	☐	☐	Some kids feel that they are very good at their school work	BUT	Other kids worry about whether they can do the school work assigned to them.	☐	☐
2.	☐	☐	Some kids find it hard to make friends	BUT	For other kids it's pretty easy.	☐	☐
3.	☐	☐	Some kids do very well at all kinds of sports	BUT	Others don't think that they are very good when it comes to sports.	☐	☐
4.	☐	☐	Some kids feel that there are alot of things about themselves that they would change if they could	BUT	Other kids would like to stay pretty much the same.	☐	☐
5.	☐	☐	Some kids feel like they are just as smart as other kids their age	BUT	Other kids aren't so sure and wonder if they are as smart.	☐	☐
6.	☐	☐	Some kids have alot of friends	BUT	Other kids don't have very many friends.	☐	☐

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	REALLY TRUE for me	SORT OF TRUE for me				SORT OF TRUE for me	REALLY TRUE for me
7.	☐	☐	Some kids wish they could be alot better at sports	BUT	Other kids feel they are good enough.	☐	☐
8.	☐	☐	Some kids are pretty sure of themselves	BUT	Other kids are not very sure of themselves.	☐	☐
9.	☐	☐	Some kids are pretty slow in finishing their school work	BUT	Other kids can do their school work quickly.	☐	☐
10.	☐	☐	Some kids don't think they are a very important member of their class	BUT	Other kids think they are pretty important to their classmates.	☐	☐
11.	☐	☐	Some kids think they could do well at just about any new outdoor activity they haven t tried before	BUT	Other kids are afraid they might not do well at outdoor things they haven't ever tried.	☐	☐
12.	☐	☐	Some kids feel good about the way they act	BUT	Other kids wish they acted differently.	☐	☐
13.	☐	☐	Some kids often forget what they learn	BUT	Other kids can remember things easily.	☐	☐
14.	☐	☐	Some kids are always doing things with alot of kids	BUT	Other kids usually do things by themselves.	☐	☐
15.	☐	☐	Some kids feel that they are better than others their age at sports	BUT	Other kids don't feel they can play as well.	☐	☐
16.	☐	☐	Some kids think that maybe they are not a very good person	BUT	Other kids are pretty sure that they are a good person.	☐	☐

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	REALLY TRUE for me	SORT OF TRUE for me				SORT OF TRUE for me	REALLY TRUE for me
17.	☐	☐	Some kids like school because they do well in class	BUT	Other kids don't like school because they aren't doing very well.	☐	☐
18.	☐	☐	Some kids wish that more kids liked them	BUT	Others feel that most kids do like them.	☐	☐
19.	☐	☐	In games and sports some kids usually watch instead of play	BUT	Other kids usually play rather than just watch.	☐	☐
20.	☐	☐	Some kids are very happy being the way they are	BUT	Other kids wish they were different.	☐	☐
21.	☐	☐	Some kids wish it was easier to understand what they read	BUT	Other kids don't have any trouble understanding what they read.	☐	☐
22.	☐	☐	Some kids are popular with others their age	BUT	Other kids are not very popular.	☐	☐
23.	☐	☐	Some kids don't do well at new outdoor games	BUT	Other kids are good at new games right away.	☐	☐
24.	☐	☐	Some kids aren't very happy with the way they do alot of things	BUT	Other kids think the way they do things is fine.	☐	☐
25.	☐	☐	Some kids have trouble figuring out the answers in school	BUT	Other kids almost always can figure out the answers.	☐	☐
26.	☐	☐	Some kids are really easy to like	BUT	Other kids are kind of hard to like.	☐	☐

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	REALLY TRUE for me	SORT OF TRUE for me				SORT OF TRUE for me	REALLY TRUE for me
27.	☐	☐	Some kids are among the last to be chosen for games	BUT	Other kids are usually picked first.	☐	☐
28.	☐	☐	Some kids are usually sure that what they are doing is the right thing	BUT	Other kids aren't so sure whether or not they are doing the right thing.	☐	☐

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